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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/608,418	06/30/2003	Yukihiro Morikawa	MORIKAWA5A	8054

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EXAMINER	
SERGENT, RABON A	

ART UNIT	PAPER NUMBER
1711	

DATE MAILED: 04/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/608,418	MORIKAWA ET AL.	
	Examiner	Art Unit	
	Rabon Sergent	1711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 January 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☒ Certified copies of the priority documents have been received in Application No. 09/910,866.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

1. The Election of Species Requirement of December 13, 2004 has been withdrawn.

2. The abstract of the disclosure is objected to because the abstract has not been presented in the form of a single paragraph. Correction is required. See MPEP § 608.01(b).

3. Claims 1-4 and 13-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Firstly, applicants' use of the word, "kinds", within claims 1-4, extends the scope of the language to the extent that the language is rendered indefinite. It cannot be determined with particularity and exactness within the meaning of the statute exactly what compounds are encompassed by the language.

Secondly, within claims 13-16, the language, "the aqueous laminate adhesive", lacks antecedent basis. It is noted that this language also appears within pages 16 and 17 of the specification.

4. Claims 13-16 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Applicants have failed to provide enablement for the production or use of the laminate adhesive in aqueous form. Applicants state at lines 9-11 of page 31 of the specification that the polyurethane resin (A) or (B) is used in a non-aqueous form.

5. Claims 1-16 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in

the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Applicants have failed to adequately teach how the contents of the tertiary amino group and carboxyl groups are determined or measured. Furthermore, it cannot be determined if tertiary amine groups and carboxyl groups derived from sources other than the claimed glycols are excluded from the determination of the claimed contents.

6. Claims 1-4 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for adhesives wherein the tertiary amine- and carboxyl-containing glycols are selected from the compounds corresponding to compounds (1)-(6), does not reasonably provide enablement for adhesives derived from virtually any kind of tertiary amine- or carboxyl-containing glycols. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims. According to the specification, the polyurethane resin component is derived from tertiary amine- and carboxyl-containing glycols which correspond to compounds (1)-(6), and the position is taken that the claims should be so limited, since applicants have provided no guidance with respect to what other types of glycol reactants can be used to prepare the adhesive.

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 5-112766 in view of Robertson et al. ('714) and JP 63-110272.

JP 5-112766 discloses a solvent based adhesive comprising a hydroxyl terminated polyurethane and a polyisocyanate curing agent. See abstract. The reference further discloses that hydrophilic group containing reactants, such as carboxyl group containing reactants, are incorporated into the polyurethane resin.

9. The primary reference appears to be largely silent regarding applicants' claimed silane coupling agent and the use of a tertiary amine containing glycol in an amount sufficient to realize the claimed tertiary amine content. However, JP 63-110272 discloses the use of applicants' claimed coupling agent within isocyanate based laminate adhesives to improve such properties as adhesion and chemical and heat resistance. See abstract. Furthermore, Robertson et al. disclose that the use of polyols containing tertiary amine within polyurethane adhesives, in amounts that yield tertiary amine concentrations comparable to applicants' claimed range, yield adhesives having improved cure rates. See abstract and column 4, lines 10-15.

10. The position is taken that one of ordinary skill in the art would have been motivated to utilize the aforementioned coupling agent and tertiary amine containing polyol in their art recognized capacity within adhesive compositions; therefore, it would have been obvious to incorporate a silane coupling agent and a tertiary amine polyol, in an amount sufficient to obtain the disclosed tertiary amine concentration, within the adhesive of JP 5-112766.

Any inquiry concerning this communication should be directed to R. Sergent at telephone number (571) 272-1079.

RABON SERGENT
PRIMARY EXAMINER

R. Sergent
April 3, 2005